

RECOMMENDATIONS FOR UTILITY IMPLEMENTATION OF TIME-VARYING RATES

- The Commission ruled that customers shall have a menu of reasonably stable cost-based electricity pricing options that include
 - ✓ A default time-of-use (TOU) rate plan
 - ✓ A non-time-varying, two-tiered rate plan with a super-user surcharge

- The IOUs have proposed TOU pilots, each with three slightly different TOU rates, and technology studies to examine use of smart thermostats (SCE, SDG&E) or smartphone app (PG&E)

- Ultimately, EDF and Siemens recommend the menu of time-variant rate options should include:
 - ✓ A static TOU price plan with two fixed periods that do not change seasonally
 - ✓ A TOU price plan that reflects the large seasonal differences in wholesale prices. Periods remain constant. An example is Variable Peak Pricing
 - ✓ An hourly price plan linked to hourly wholesale prices and designed to reward customers with distributed energy resources and best practices that enable quick, reliable responses to energy price changes.

- Customers should have access to the information they need to choose a rate that benefits them the most, including:
 - ✓ Forecast of their bill next year for each rate option, based on last year's interval data
 - ✓ What typical load shifting response and bill savings might be possible for each rate option
 - ✓ Education about available choices through multiple channels, *including experts explaining rates options at service initiation*

- Customers should be fully empowered to respond to pricing signals
 - ✓ Easy access to rate information via a variety of channels
 - ✓ Easy access to historic usage data, bill comparison forecasts under rate options, and home energy analysis to know options for conservation and load shifting.
 - ✓ Smart phone app with near-real-time data (e.g., streaming updates every 15 minutes) via AMI network – if feasible – so customers can have communications in real time, and especially during peak times
 - ✓ Third party access to customer-authorized data that includes bill, usage and utility intervention histories, and pricing plans
 - ✓ Automated response, such as smart thermostats to manage energy use and minimize bills

- Customers will benefit most from currently planned utility pilots and demonstrations when the IOUs coordinate their own efforts, particularly with the following proceedings:
 - ✓ Distribution Resources Planning demonstrations should utilize customers enrolled in TOU pilots, particularly with respect to compensating customers with DERs that provide value to the distribution grid (Demonstration C)
 - ✓ IDER pilots that, as EDF has suggested, test the use of cost-based retail prices to reward DERs that provide value to the grid
 - ✓ EV vehicle grid integration pilots to demonstrate smart charging to capture available renewable generation capacity and reduce need for ramping resource use.

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